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| 09/550,686 | 04/17/2000 | Julia Hirschberg | 2000-0026 | 1854 |

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| EXAMINER |
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SPOONER, LAMONT M

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| ART UNIT | PAPER NUMBER |
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11/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 09/550,686 | Applicant(s) HIRSCHBERG ET AL. | |
| | Examiner LAMONT M. SPOONER | Art Unit 2626 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,8-10,24 and 27-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,8-10,24 and 27-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Introduction

1. This office action is in response to applicant's amendments filed 8/6/08. Claims 1, 4, 5, 8-10, 24 and 27-31 are currently pending and have been examined.

Response to Arguments

2. Applicant's arguments filed 8/6/08, regarding 35 USC 103 (Epstein et al (6,327,343) in view of Kanevsky et al. (Kanevesky, US 6,219,407)) have been fully considered but they are not persuasive.

In response to applicant's arguments regarding the 35 USC 112 rejection, applicant claims "tagging each of the one or more voice mail messages with the respective identity and an indication of certainty of the respective determined identity of the caller for each respective voice mail message." The Examiner currently fails to locate the teaching of this claimed element anywhere in the specification. The Examiner notes, on p.7 lines 8-28 of applicant's specification, applicant discusses tagging the voice mail message with the callers identity if there is a match. The Examiner further notes in the above cited section, the matching may be determined by a threshold process. The Examiner advises the applicant to clearly point

out where the newly added limitation is taught. The amended specification is not permitted, as the Examiner is unable to determine by the original disclosure the required information present in order to facilitate such an amendment.

In regards to applicant's arguments:

Page 10 paragraph 1 regarding claim 1, "Inasmuch as neither Epstein et al. nor Kanevsky et al. teach recording an indication of certainty of the determined identity, much less tagging voicemail messages with the indication of certainty, Applicants submit that claim 1 is in condition for allowance. Applicants respectfully request that the 35 U.S.C. 103(a) rejection be withdrawn." The Examiner notes the remaining arguments are based upon this premise, regarding claim 8 and 24, page 10, paragraphs 3 and 4 respectively,

"Claim 8 has been amended similarly to claim 1 to recite "tagging each of the one or more voice mail messages with the respective identity and an indication of certainty of the respective determined identity of the caller for each respective voice mail message." Inasmuch as neither Epstein et al. nor Kanevsky et al. teach recording an indication of certainty of the determined identity, much less tagging voicemail messages with the

indication of certainty, Applicants submit that claim 8 is in condition for allowance. Applicants respectfully request that the 35 U.S.C. 103(a) rejection be withdrawn.

Claim 24 has been amended similarly to claims 1 and 8 to recite "means for tagging each of the one or more voice mail messages with the respective identity and an indication of certainty of the respective determined identity of the speaker for each respective voice mail message." Inasmuch as neither Epstein et al. nor Kanevsky et al. teach recording an indication of certainty of the determined identity, much less tagging voicemail messages with the indication of certainty, Applicants submit that claim 24 is in condition for allowance. Applicants respectfully request that the 35 U.S.C. 103(a) rejection be withdrawn." The Examiner notes the dependent claim's arguments are based on the above arguments.

The Examiner cannot concur with applicant's arguments. Epstein explicitly teaches, C.5 lines 38-50, and C.7 lines 21-26, "An **identification (ID) tagger module 30**, operatively connected to the **speaker recognizer module 22**, is provided for **electronically tagging the identity of the caller to the caller's message** or conversation or tagging..." and "If the

speaker is identified by matching the received voice data with previously stored voice model of such speaker...” The Examiner notes that it is explicitly inherent, without room for alternate interpretation, in a **speech recognition module** based on the comparison of models, and a matching computation, there is an inherent value that must be matched, and the matching/identification of such **is inherently and defined by a degree of certainty**, thus providing identity tagging based on a degree of certainty, the voice mail message being tagged by the ID, based upon speech recognition and matching. Thus all applicants’ presented arguments are unpersuasive.

Specification

3. The amendment filed 8/6/08 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: “Each voice mail message may be tagged with an indication of certainty of the identity of the caller for each respective voice mail message, regardless of whether a match is said to exist whether the identity is unknown.”

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 8 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. More specifically, applicant claims “tagging each of the one or more voice mail messages with the respective identity and an indication of certainty of the respective determined identity of the caller for each respective voice mail message.” The Examiner fails to locate the teaching of this claimed element anywhere in the specification. The Examiner notes, on p.7 lines 8-28 of applicant’s specification, applicant discusses tagging the voice mail message with the callers identity if there is a match. The Examiner further notes in the above cited section, the

matching may be determined by a threshold process. The Examiner advises the applicant to clearly point out where the newly added limitation is taught.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4, 5, 9,10, 24, and 27, 28, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein et al (6,327,343) in view of Kanevsky et al. (Kanevesky, US 6,219,407).

As per **claims 1 and 24**, Epstein et al teach a method for indexing voice mail messages, comprising:

"Receiving one or more voice mail messages from one or more callers" (co1. 6, lines 50-55);

"Determining the identity of each of the one or more callers in each of the one or more voice mail messages (1) by comparing the speech signals from each of the one or more voice mail messages with one or more caller speaker models" (col. 7, lines 22-26) and (2) based on an analysis of the

content of each of the one or more voice mail messages (C.7.lines 32-35-
“his extractions of the callers name” as the content of the message);

“tagging each of the one or more voice mail messages with the
respective determined identity and an indication of certainty of the
respective determined identity of the caller for each respective voice mail
message.” (abstract, the system is able of tagging the identity of a caller,
col. 5, lines 37-45, his identification tagger 30, col. 7 lines 14-28-his
probabilistic speaker recognition module, connected to the identity tagger,
C.5 lines 38-50, and C.7 lines 21-26, “An **identification (ID) tagger
module 30**, operatively connected to the **speaker recognizer module 22**,
is provided for **electronically tagging the identity of the caller to the
caller’s message** or conversation or tagging...” and “If the speaker is
identified by matching the received voice data with previously stored voice
model of such speaker...” The Examiner notes that it is explicitly inherent,
without room for alternate interpretation, in a **speech recognition module**
based on the comparison of models, and a matching computation, there is
an inherent value that must be matched, and the matching/identification of
such **is inherently and defined by a degree of certainty**, thus providing
identity tagging based on a degree of certainty, the voice mail message

being tagged by the ID, based upon speech recognition and matching.);
and

when the determined identify of the caller of a voice mail message cannot be determined to a threshold certainty (see above discussion of certainty with respect to matching and probability);

tagging that voice mail message as unknown" (col. 7, lines 55-61, if the identity of the caller ultimately cannot be identified, the user (voice mail subscriber) 12 may program the system through the programming interface 38 to process the call based on the unknown caller; and the system may be programmed to store the name and originating telephone number of every caller at col. 8, lines 15-17).

a storage folder for voice mail messages from the caller corresponding to the identity (C.13.lines 39-65).

It is noted that Epstein et al teach the claimed invention but does not explicitly teach receiving an indicated identity of the unknown message caller from a voice mail subscriber, and creating a storage folder for voice mail messages from the caller corresponding to the indicated received identity. However, this feature is well known in the art as evidenced by Kanevsky et al who teaches (col. 5, lines 38-42, the subscriber enrolls the

new caller, see also C.9.lines 29-35). Therefore, one having ordinary skill in the art at the time the invention was made would have found it obvious to modify Epstein voice mail message for callers with the enrollment of new callers as taught by Kanevsky because the system would enroll any new message from a new caller for subsequent processing, i.e. storing messages from the caller in a particular folder, etc (ibid, Kanevsky).

As per **claims 4 and 27**, Epstein and Kanevsky make obvious claim 1, Epstein further teaches wherein the one or more caller speaker models are created from one or more voice mail messages left by a same caller (C.5.lines 10-17-his voice data as the voice mail message).

As per **claims 5 and 28**, Epstein and Kanevsky make obvious claim 1, Epstein further teaches wherein the one or more speaker models are created using acoustic features extracted from the voice mail message, the acoustic features extracted using speaker recognition techniques (C.8.lines 36-56).

As per **claims 9 and 30**, Epstein and Kanevsky make obvious claim 1, Epstein further teaches wherein the step of determining the identity of each of the one or more callers in each of the one or more voice mail messages includes the substep of:

using automatic number identification to assist in determining the caller's identity (C.5 lines 52-65).

As per claims 10 and 31, Epstein and Kanevsky make obvious claim 1, Epstein further teaches, wherein the step of determining the identity of each of the one or more callers includes the substep of:

using speech recognition techniques to extract caller identity information from the one or more voice mail messages (C.8.lines 36-55).

8. Claims 8 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein et al (6,327,343) in view of Kanevsky et al. (Kanevesky, US 6,219,407), and further in view of Murveit et al. (Murveit, US 6,766,295).

As per **claim 8**, Epstein et al teach a method for indexing voice mail messages, comprising:

"Receiving one or more voice mail messages from one or more callers" (co1. 6, lines 50-55);

"Determining the identity of each of the one or more callers in each of the one or more voice mail messages (1) by comparing the speech signals from each of the one or more voice mail messages with one or more caller speaker models" (col. 7, lines 22-26) and (2) based on an analysis of the

content of each of the one or more voice mail messages (C.7.lines 32-35-

"his extractions of the callers name" as the content of the message);

"tagging each of the one or more voice mail messages with the respective identity and an indication of certainty of the respective determined identity of the caller for each respective voice mal message."

(abstract, the system is able of tagging the identity I of a caller, col. 5, lines 37-45, his identification tagger 30, col. 7 lines 14-28-his probabilistic speaker recognition module, connected to the identity tagger); and

when the identify of the caller of a voice mail message cannot be determined; tagging that voice mail message as unknown" (col. 7, lines 55-61, if the identity of the caller ultimately cannot be identified, the user (voice mail subscriber) 12 may program the system trough the programming interface 38 to process the call based on the unknown caller; and the system may be programmed to store the name and originating telephone number of every caller at col. 8, lines 15-17)

It is noted that Epstein et al teach the claimed invention but does not explicitly teach receiving an identity of the unknown message caller from a voice mail subscriber. However, this feature is well known in the art as evidenced by Kanevsky et al who teaches (col. 5, lines 38-42, the

subscriber enrolls the new caller, see also C.9.lines 29-35). Therefore, one having ordinary skill in the art at the time the invention was made would have found it obvious to modify Epstein voice mail message for callers the enrollment of new callers as taught by Kanevsky because the system would enroll any new message from a new caller for subsequent processing, i.e. storing messages from the caller in a particular folder, etc (ibid, Kanevsky).

It is further noted that Epstein and Kanevsky do not explicitly teach, wherein the voice mail message tagged as unknown is used to adapt a previously created speaker model. However, this feature is well known in the art as evidenced by Murveit, who teaches adapting a previously created speaker model (abstract) in a first session with a speaker. Therefore, at the time of the invention, it would have been obvious to modify the combination of Kanevsky with Epstein's model with a modified model for a first encounter for the benefit of improving the speech recognition system for a speaker (abstract) who's identity is to be determined.

As per **claim 29**, claim 29 sets forth limitations similar to claims 1 and 8 is completely within the scope of rejected claims 1, and 8, and is thus rejected for the same reasons and under the same rationale.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAMONT M. SPOONER whose telephone number is (571)272-7613. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571/272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lms
11/19/08

/Patrick N. Edouard/
Supervisory Patent Examiner, Art Unit 2626